Figure 1

```
                    10          20          30          40
                    |           |           |           |
p27 protein    1    MSNVRVSNGSPSLERMDARQAEHP--KPSACRNLFGPVDHEELTRD---L
p57 protein    1    MSDASLRS-TSTMERLVARGTFPVLVRTSACRSLFGPVDHEELSRE---L
p21 protein    1    MS----------EPAGDVRQNPC--GSKACRRLFGPVDSEQLRRDCDAL

                    50          60          70          80          90
                    |           |           |           |           |
p27 protein   46    EKHCRDMEEASQRKWNFDFQNHKPLEG--KYEWQEVEKGSLPEFYYRPPR
p57 protein   47    QARLAELNAEDQNRWDYDFQQDMPLRGPGRLQWTEVDSDSVPAFY--RET
p21 protein   38    MAGC--IQEARER-WNFDFVTETPLEG--DFAWERVRGLGLPKLYL-PTG

                        100                         110         120
                        |                           |           |
p27 protein   94    PPKGACKV-------------------PAQES----QDVSGSRPAAPLIGA
p57 protein   95    VQVGRCRLLLAPRPVAVAVAVSPPLEPAAESLDGLEEAPEQLPSVPVPAP
p21 protein   82    PRRG---------------------R----DELGGGRRP------

                        130         140         150
                        |           |           |
p27 protein  122    PANSEDTHLVDPKTDPSDSQTGLAEQCAGI-------------------
p57 protein  145    ASTPPPVPVLAPAPAPAPAPVAAPVAAPVAVAVLAPAPAPAPAPAPAPAP
p21 protein   96    ---GTSPALLQGTAE--EDHVDLSLSCTLV-------------------

                                    160         170
                                    |           |
p27 protein  152    -----------RKRPATDDSSTQNKRANRTEENVSDG-------------
p57 protein  195    VAAPAPAPAPAPAPAPAPAPAPDAAPQESAEQGANQGQRGQEPLADQLHS
p21 protein  121    -----------P-RSGEQAEGSPGGPGDSQGRKRRQT------------

                                            180         190
                                            |           |
p27 protein  178    -------------------------SPNAGSVEQTPKKPGL----------
p57 protein  245    GISGRPAAGTAAASANGAAIKKLSGPLISDFFAKRKRSAPEKSSGDVPAP
p21 protein  146    -----------------------S--MTDFYHSKRRLIF---------

p27 protein  194    ------------------RRRQT
p57 protein  295    CPSPSAAPGVGSVEQTPRKRLR
p21 protein  160    ----------------SKRKP
```

Figure 2

a.

b.

c.   d.

Figure 3

Figure 4

a.

b.

c.

Figure 5

a.

b.
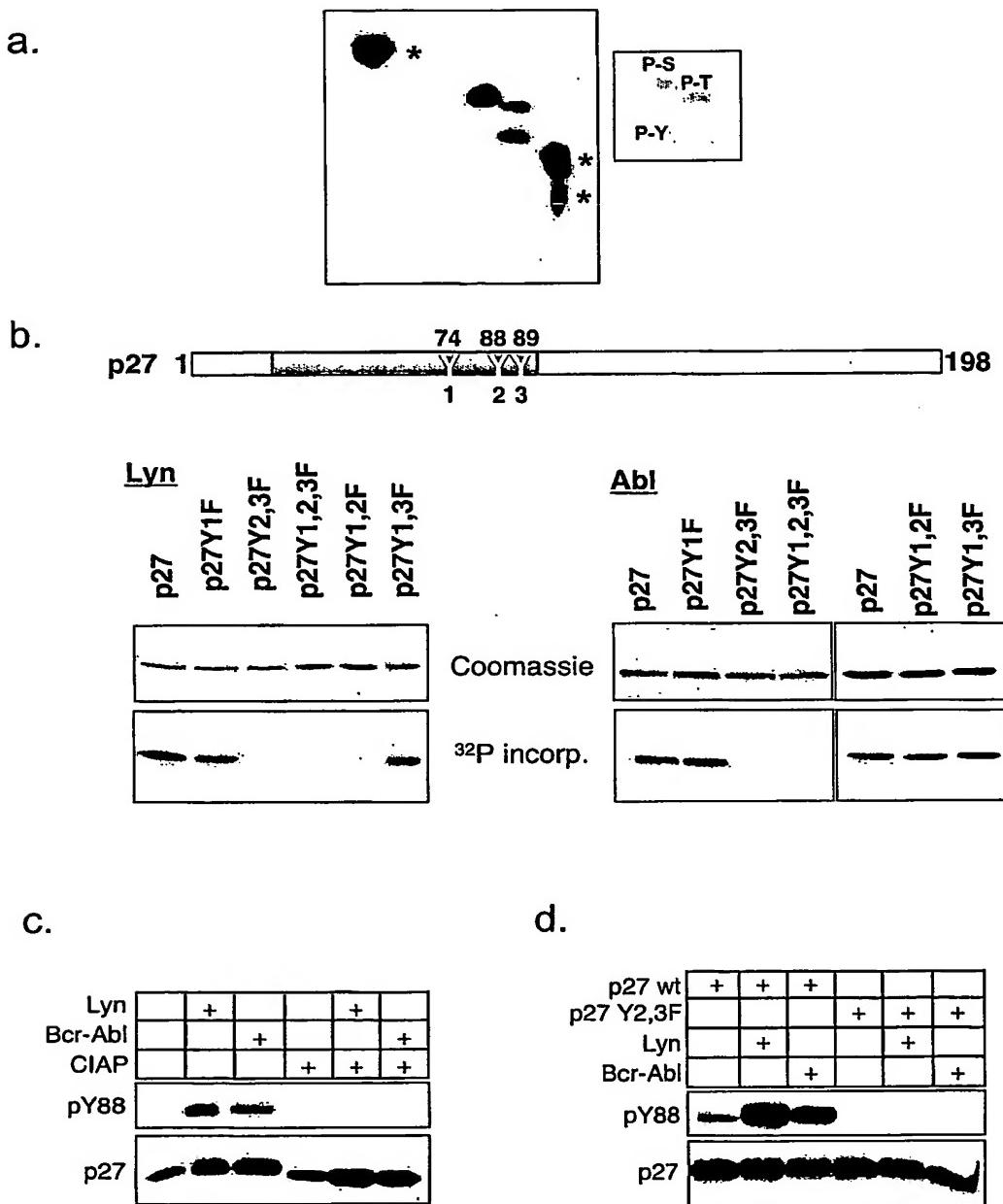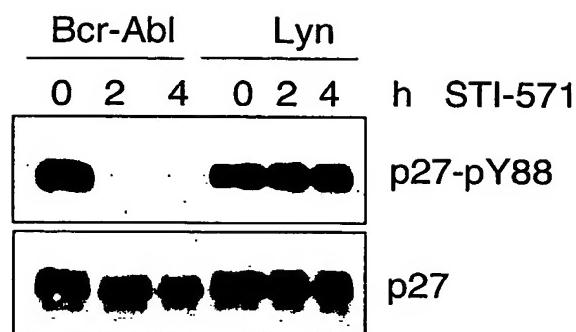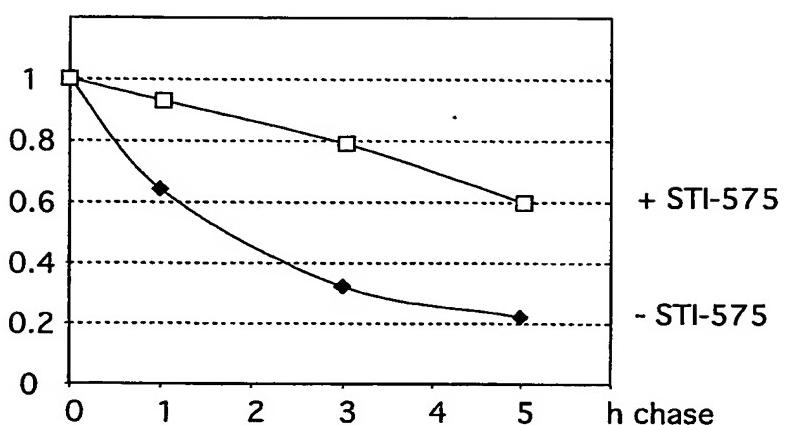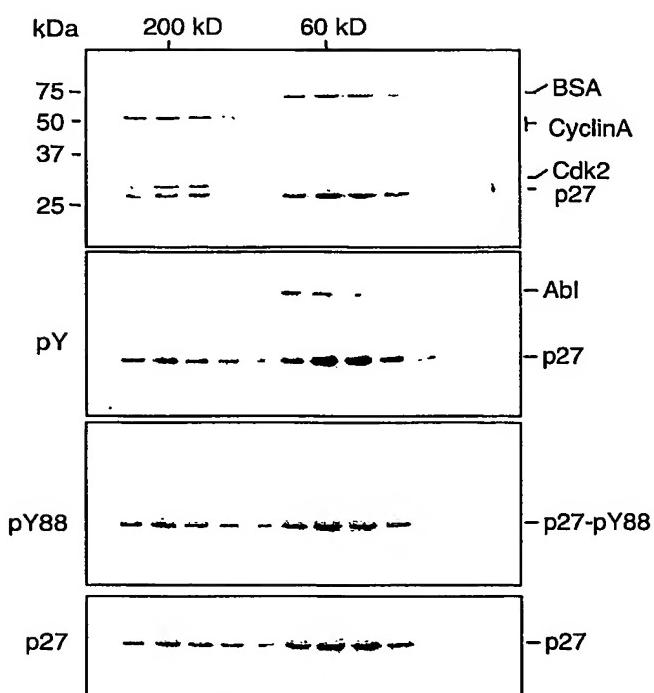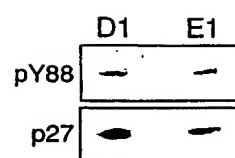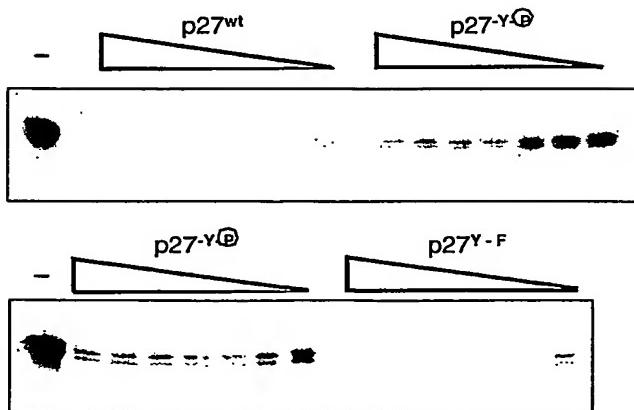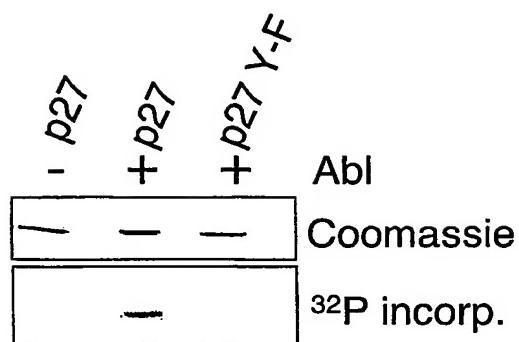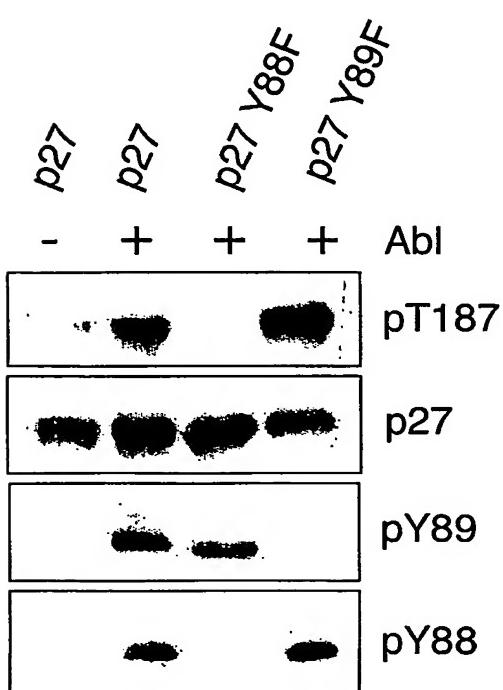
Fig. 6:

A

1a 2a 1b 2b

Radiogramm — p27

— p21

B

Ninhydrinanfärbung des
Aminosäurestandards
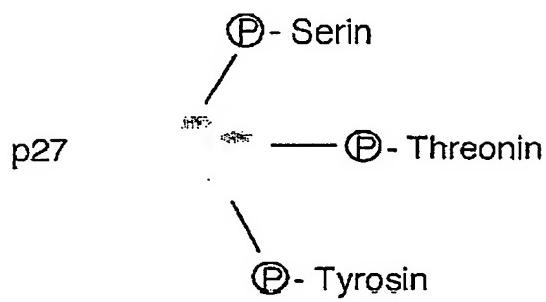
Radiogramm

freies Phosphat

Ⓟ - Serin

Ⓟ - S

p27 —— Ⓟ - Threonin

Ⓟ - T

Ⓟ - Y
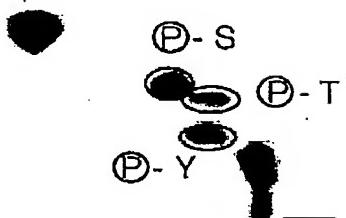
nicht hydro-
lysiertes
Protein
und Peptide

Ⓟ - Tyrosin

Ⓟ - S

p21

Ⓟ - T

Ⓟ - Y
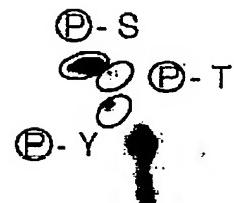
Fig. 7:
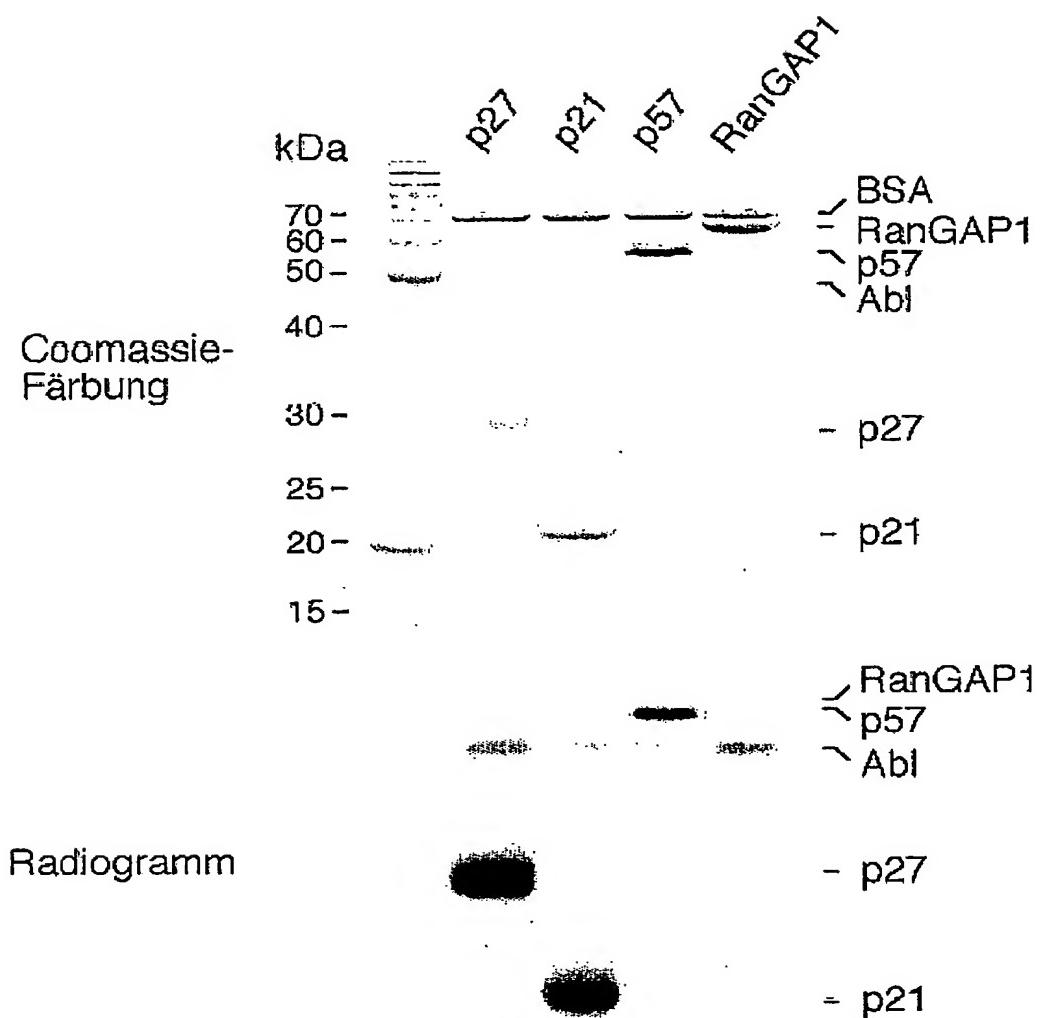
Fig. 8
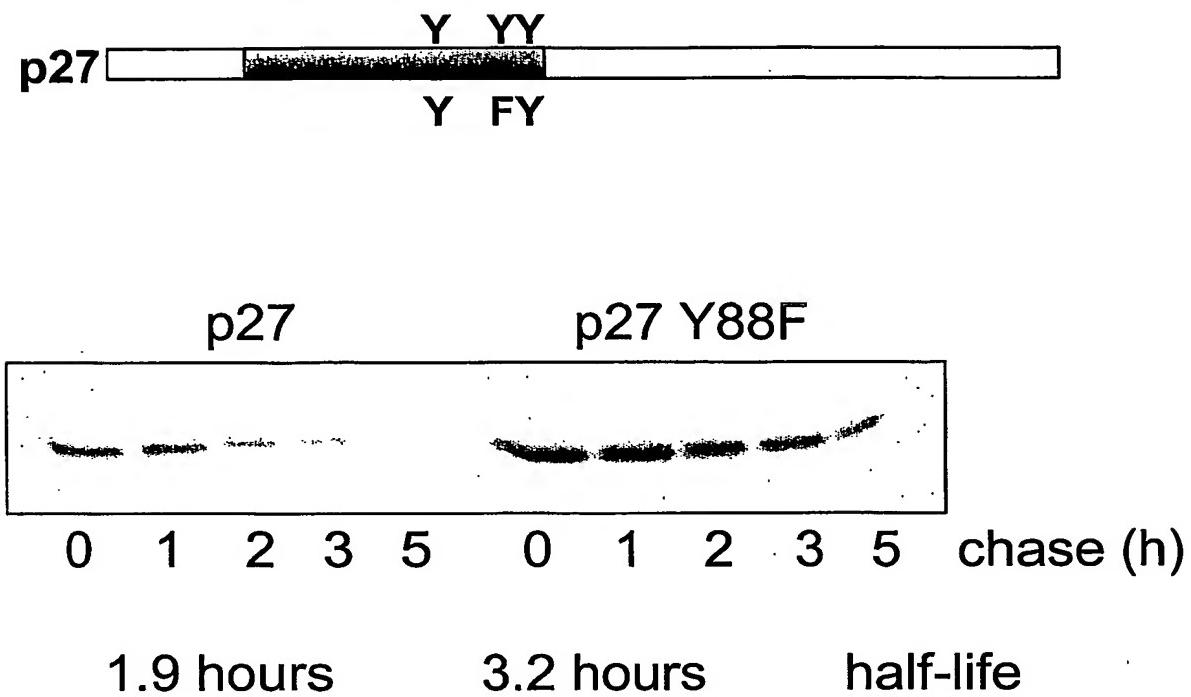
Fig. 9

Only p27 Y88F arrests K562 CML cells
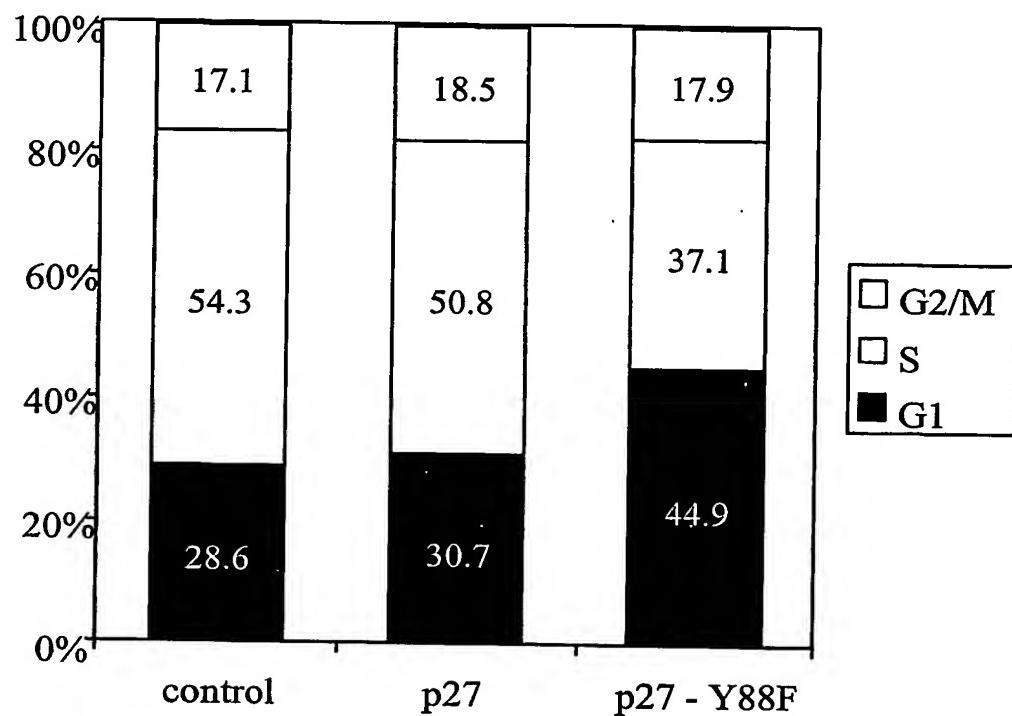
Cells with similar GFP expression were isolated and analysed